

Trial Protocol

Approved by the IRB at Loyola Marymount University on August 14th, 2018

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Study Title: *PNF 2.0: A Novel, Gamified, Facebook-Integrated PNF Intervention to Reduce Alcohol Use and Negative Consequences among Sexual Minority Women*

Trial Registration: ClinicalTrials.gov NCT03884478;

<https://clinicaltrials.gov/ct2/show/NCT03884478>

IRB Application Questionnaire

All materials must be typed.

1. RESEARCH BACKGROUND

Please describe the purpose of your research. Provide relevant background information and briefly state your research question(s). You may provide relevant citations as necessary. (300 Word Max.)

Lesbian, bisexual, and queer-identified (LBQ) women in the United States are more likely to drink alcohol, engage in heavy alcohol use, experience alcohol-related problems and become dependent on alcohol than are heterosexual women. Although web-based PNF interventions have become popular strategies to correct misperceived norms and reduce alcohol use in other populations, lesbian and queer women constitute a hidden population not easily reached by traditional intervention efforts. This NIAAA-funded project implements and evaluates a novel, gamified, web-based PNF alcohol intervention format culturally tailored to appeal to members of the local Los Angeles lesbian and queer female community. Packaged as a digital social game about LBQ stereotypes, LezParlay features established game mechanics including co-presence, a system of points, chance-based uncertainty, and multiple feedback topics to increase appeal and remedy many of the limitations (i.e., defensiveness, reactance, and lack of attention) associated with standard web-based PNF interventions. Uniquely, to confront both social and coping antecedents of lesbians' drinking, LezParlay seeks to reduce drinking among LBQ women by providing PNF on both alcohol use and coping behaviors utilized by peers to navigate sexual minority stigma stressors.

Multiple strategies will be employed to recruit approximately 1200 lesbian, bisexual, and queer identified women residing in the United States to take part in the online LezParlay competition. Topics in the game will change from month to month and will feature stigma-coping behaviors and alcohol use, among other topics related to familiar lesbian and queer stereotypes (e.g., relationships, sex, identity, money, stress, and future plans). Over 8 monthly rounds of play, players will receive PNF on different topics and compete for cash prizes as they test the accuracy of their peer perceptions and discover how their own attitudes and behaviors compare to actual group norms. Importantly, in Round 3, when alcohol use is first assessed as a topic, a sub-sample of 500 players who report moderate drinking will be invited to participate in a LezParlay evaluation study. Participants who elect to take part in the study will be randomized to receive either PNF on alcohol use + coping behaviors, PNF on alcohol use + control topics, or PNF on control topics in subsequent rounds of the game. These study participants will be incentivized for playing remaining rounds and completing a follow-up survey about their experiences. Analysis of LezParlay efficacy will focus on longitudinal changes in alcohol use and coping behaviors associated with condition assignment and subsequent receipt of PNF among study participants. Analysis of feasibility associated with the gamified LezParlay format will focus on acceptability ratings and other feedback gathered from trial participants as well as basic application usage among the pool of players who elect to take part in the competition but do not participate in the study, and thus, are not incentivized for their completion of rounds.

2. SUBJECT RECRUITMENT

**How will subjects be selected? What is the sex and age range of the subjects?
Approximately how many subjects will be studied?**

**How will subjects be contacted? Who will make initial contact with subjects?
Specifically, what will subjects be told in initial contact?**

The LezParlay competition will be open to ALL lesbian and queer-identified women between 21 years of age and older who reside in the United States. Although there is no upper limit on the number of women who can take part in the competition, we expect to recruit at least 1,200 LBQ women (400 women in each age-group; 20s, 30s, 40s, and 50s).

The game will be promoted via 3 mechanisms. First, flyers will be distributed locally at Los Angeles events for LBQ women put on by collaborating partners LezDoBrunch and the Los Angeles LGBT Center and Los Angeles Women's Network. Second, targeted social media advertisements will promote LezParlay on Facebook, Instagram, and HER social media platforms to lesbian and queer identified female users residing in different regions of the United States. Third, promotional emails describing the game will be sent to the email list of Autostraddle, a popular online blog for queer women. Registered players can earn bonus points in initial rounds of the game by inviting friends to play. All recruitment materials will link to the LezParlay website which provides information about the game and invites participants to register online (www.lezparlayla.com). APPENDIX A includes recruitment ads and flyers.

If subjects will be screened, describe criteria and procedures.

Two different levels of “participants” will take part in LezParlay: “Evaluation Study Participants” (N=500) among whom we will assess efficacy of LezParlay in reducing alcohol use; and, “Non-Evaluation Study Participants” (N=800+) among whom we will assess feasibility and engagement with the LezParlay web app.

LezParlay Participant Inclusion Criteria (Applies to all players):

To take part in the LezParlay competition individuals must:

- 1) Self-identify as a lesbian, bisexual, or queer woman
- 2) Be 21 years of age or older
- 3) Reside in the United States
- 4) Accept LezParlay Terms of Service & Privacy Policy

LezParlay Evaluation Study Participant Inclusion Criteria

To take part in the Evaluation Study, LezParlay Participants must:

- 1) Report having had 3+ drinks on one occasion during the past 2 months OR drinking alcohol 3+ times per week during the past 2 months in response to a Round 3 Alcohol use questions
- 2) Review and Accept the Evaluation Study Informed Consent page
- 3) Have taken part in at least 1 previous round of the competition

Two questions about alcohol use in the third round of the game will act as a screening item for the Evaluation study. Specifically, participants will be quota sampled by Qualtrics in response to a Round 2 question about the maximum number of drinks consumed on one occasion during the past month. The first 150 drinkers in each age-group (i.e., 20s, 30s, 40s, 50s) who provide an answer equal to or above 3 drinks in response to this question will be invited to become an official tester in a study evaluating LezParlay. On screen text will explain that as a participant in this study they can help evaluate LezParlay by playing the next 5 rounds of the game and completing a follow-up survey about their experiences when the game is over. Further, study participants will be emailed a \$40 electronic gift card to compensate them for their time and they will still be eligible to compete for performance-based cash prizes awarded to the top scorers.

“Non-Evaluation Study participants” refer to players who register for LezParlay but either do not screen into the study or choose not to participate in the study. Non-Evaluation Study participants are not incentivized for round completion but may compete for several performance-based cash prizes awarded to the top scorers in each age-group. For these participants, LezParlay web app data analyzed for research purposes is limited to aggregated demographic data provided at registration, the number of

rounds played, number of logins, and number of screen views. Collection and analysis of this data is outlined in the web app's Terms of Service & Privacy Policy which ALL participants must review and accept at registration.

3. PROCEDURES

Summarize fully all procedures to be conducted with human subjects.

All contact with participants will occur digitally via emails, text messages, and Qualtrics surveys embedded within the LezParlay web app. All recruitment materials will link to the LezParlay website which provides information about the game and button to register. The registration survey will verify participants' geolocation in the United States, prompt participants to review and accept the LezParlay's Terms of Service & Privacy Policy, and create a unique username and password which they will use to login to the LezParlay web app. Additional registration items will ask participants to select their sexual identity (i.e., lesbian or queer), and provide their mobile phone number, email address, relationship status, birthdate and age-group. The registration survey will also present participants with the option of uploading a photo avatar to represent them within the web-app. Descriptive text will explain that if they elect to provide one, their custom avatar will be visible within the app to other logged in players. If they choose not to upload an avatar they will be represented within the app by a default blank avatar (as is done across popular social media sites and apps in the absence of a custom user avatar).

Submitting the registration form will trigger a verification text message to be sent to the mobile phone number provided by the participant. Upon receiving the text and clicking on the unique url delivered, the participant's avatar will be updated with a blue check mark and they will receive 100 Parlay Points to place bets with in Round 1. Simultaneously, verification locks the phone number so that it cannot be associated with any future LezParlay registrations and assigns a unique PIN to the participant in the registration database. As most individuals only own a single mobile phone (or 2 at the most), this protocol helps ensure that players cannot try to cheat the LezParlay system by creating multiple accounts in order to place wagers on all possible combinations of guesses. Further, the unique PIN assigned to each verified account then acts as the piece of data used by LezParlay to link participants' guesses, bets, responses, and scores across rounds of play.

Round Play- upon verification, players will be redirected to a series of instructional screens (See Appendix C) that reviews how LezParlay works and explain that points are won and lost by placing bets on your perceptions of the behaviors and attitudes of the typical LBQ woman in your age-group. In each round there will be between 1 and 3 question topics and each topic will contain approximately 8 questions. Four questions will ask you to report your own topic-specific behaviors or attitudes and the other four will ask you to guess about how other players in your age-group answered the same questions. For each guess you will be prompted to select the number of points you would like to bet on your guess being correct based on the average responses of other players. Screens will also inform participants that there is a variable cash prize between \$100 and \$500 in each round that will be awarded to the player who accumulates the largest number of points in that round. There are also grand prizes (\$1000, \$500, and \$250) that will be awarded to the top 3 scorers in each age-group who accumulate the largest numbers of points across rounds of play. A final screen will explain that after a critical mass (N=300+) in each age-group has played a round, LezParlay will text and email all players with a private link to an overview of the points won and lost along with detailed results on one topic. Detailed results are intended to help players improve the accuracy of their perceptions and place smarter bets in future rounds, as question topics may be repeated. Following this overview, a button will allow players to begin round 1.

The first screen in the round will reveal 2-3 question topics and the amount of the cash prize for the round's top scorer. Players will report their own answers to the questions then guess and bet points

(i.e., 10, 25, or 50 points) on how other players will answer. Upon placing their bets, a final screen will reiterate that results will be sent out when a critical mass has played in their age-group. Additionally, they will be informed that they can help speed this along by inviting friends to play by sharing their personalized referral link, displayed below and also available in their account tab. When a critical mass has played (>300 in each age-group which we expect to take approximately 3 weeks), average responses to questions have been computed, and points won and lost have been calculated, links to view detailed results will be sent to players via text message and email. Clicking the private url will take the player to a spinner screen which displays their total score and reveals their detailed results topic initial “RESULTS LOADING” screen which summarizes the number of players in the users’ age-group who played the round to generate the correct answers (i.e., actual norms). Consistent with co-presence features in popular social media and digital apps, this summary consists of an animated that collage displays the thumbnail avatars of all the players who completed the round. Recent studies in our lab have established that showing participants the peers on whom actual norms are based through such a collage increases the believability and credibility of the actual norms to be presented on subsequent feedback screens. The next screen encountered when viewing one’s detailed results will feature 3 animated graphical doors and instructions to select (tap or click) 2 of the doors in order to reveal either bonus points or topics on which detailed results will delivered. For each question topic revealed by the door selection mechanic, personalized normative feedback (PNF) for each question will follow. PNF consists of bar charts with bars respectively representing 1) the participant’s guess about how other players answered (i.e., perceived peer norm); 2) the participant’s own answer to the question; and, 3) the actual average answer submitted by other players (i.e., actual peer norm). Text on each PNF screen will highlight an interesting statistic related to the actual norm and detail the number of points won/lost based on the accuracy of the player’s guess. Following PNF screens, participants will be presented with their total score and their age-group’s leaderboard which also crowns the winner of the round’s cash prize. The round winner will also be notified by email and text message and have the option of receiving their Visa gift card electronically or through the mail. See Appendix B for mockups of app screens.

After viewing these results screens, participants have the option of beginning the next round or being reminded to complete it later. The participant experience and sequence of screens encountered in all rounds are the same as detailed above with 2 exceptions: Rounds 3 and 4, which are intervention rounds and Rounds 7 & 8 which include REPLAY BONUSES.

Intervention Rounds 3 and 4. We aim to recruit a minimum of 1200 LBQ women to sign up during the first 2 monthly rounds to ensure that meaningful and stable sexual identity– and age group–specific actual norms for drinking and coping behaviors can be delivered in intervention rounds 3 and 4. From this larger pool of players, 500 will be recruited to participate in a LezParlay evaluation study (RCT) during Round 3. Acting as baseline (T1) for the RCT, Round 3 will feature questions about alcohol use, stigma experiences, and a group of nonhealth-related control questions submitted by players. Upon submitting answers to alcohol-related questions in Round 3, players will be covertly screened for evaluation study eligibility based on their answers (i.e., number of drinking days per week and peak drinks on a single day during the past 2 months) as well as their geolocation and the number of previous rounds played. Those who have played at least one previous round, are in the United States, and report drinking alcohol on 3 or more days per week or having 3 or more drinks on their peak drinking occasion will be invited to take part in an evaluation study at the end of the round. Interested potential participants will advance to an informed consent screen that explains that the goal of the study is to evaluate the impact and format of detailed results received in LezParlay and gather player feedback to inform the next version of the competition. The information further detailed that participation in the evaluation study simply involves playing and viewing detailed results in subsequent rounds and completing a brief feedback survey at the end of the competition. Participants can earn up to US \$40 in electronic gift cards of their choice to play subsequent rounds and complete the feedback survey. Those who check a box indicating that they understood what the study participation entails and would like to participate will be welcomed into the study.

Qualtrics Research Suite's automated randomizer will be used to randomize evaluation study participants to a PNF condition at the point of study enrollment in round 3. Randomization will determine the sequence of topics on which participants will receive detailed results across intervention rounds 3 and 4: alcohol+coping, alcohol+control, or control only. Members of the research team will be blinded to participant condition assignment, and the study participants will not be aware that any sort of randomization was taking place. Rather, like in other rounds, when detailed results are sent players will be prompted to choose among 3 animated, graphical doors to determine the topics on which they will view detailed results. Although the results topics will be truly determined via chance in most rounds of the competition, the doors of evaluation study participants will be fixed to open to their randomly assigned feedback topics regardless of the door they selected in rounds 3 and 4. Upon completing the feedback survey at the end of the competition, participants will be debriefed regarding the study's research questions and the fixed sequences of health or control feedback they were randomized to receive in rounds 3 and 4. See Appendix D for the Debriefing Statement.

Replay Bonus Rounds 7 and 8.

The last 2 rounds of the competition, 7 & 8, will feature new question topics as well as previously assessed REPLAY BONUS topics which will allow all players to boost their scores by placing very large bets on a topic they already received feedback on and very small bets for topic on which feedback has not yet been delivered. PNF will be delivered for the new topics assessed in each round but will not be repeated for REPLAY BONUS topics. Instead a single screen will reveal the points earned from REPLAY BONUS. Importantly, answers to REPLAY BONUS questions in Round 7 among intervention study participants' will act as the 2 month post-intervention follow-up for the purpose of the evaluation study RCT.

Competition Conclusion

Following the announcement of winners after Round 8, the LezParlay competition will be over. A special sequence of screens follow for Evaluation Study Participants. Study participants will be provided the opportunity to complete the follow-up survey for the evaluation study on screen or have the link to emailed/texted to them so that they can complete it later. Upon submitting the short follow-up survey, participants will be prompted to select a \$40 electronic gift card (Amazon, Target, Starbucks, etc.) to receive via email. A final screen will thank them for their time and debrief them about the fixed nature of the spinners that selected their detailed results topics in Rounds 3 and 4. Text will reveal that this was necessary in order to examine the perceptual and behavioral impacts of different combinations of detailed results delivered in these rounds. Questions to be featured in Intervention and Replay Bonus Rounds are presented in Appendix C. A list of potential control/filler stereotype related questions to comprise other rounds of play also follow in Appendix C. APPENDIX D also provides the Evaluation study follow-up survey and debriefing statement.

4. RISKS / BENEFITS

What are the potential benefits to subjects and/or to others?

What are the reasonably foreseeable risks to the subjects? (Risks may include discomfort, embarrassment, nervousness, invasion of privacy, etc.) If there are potential risks to subjects, how will they be minimized in advance? How will problems be handled if they occur?

Participants will benefit from LezParlay through their receipt of detailed feedback revealing actual LBQ community norms and how they compare to LBQ peers on a wide range of behaviors and attitudes of interest to this population. Feedback on alcohol use and coping behaviors are anticipated to show participants that their peers consume less alcohol and drink to cope with negative affect less than they thought. This information is anticipated to have a protective effect on participants' own alcohol use. For

some, participation in LezParlay may also satisfy curiosities about the LBQ community or help to diminish harmful stereotypes. For others, learning about health and relationship behaviors of LBQ peers may benefit their own health behaviors and relationships. Others may simply find entertainment in the wagers, scoring and feedback. Participants' responses to LezParlay questions, in aggregate may also help shape future programming by our community partners, which in turn, may benefit their future well-being. In addition, participants in the evaluation study may enjoy the opportunity to share what they liked about LezParlay, what they hated, and any ideas they have for improvements with the game's founders.

Psychological risks posed by the research are primarily related to the sensitivity of some of the questions. Participants will be prompted to report their alcohol use, coping behaviors, health behaviors, future plans, relationship and sexual behaviors, information that may be private. These questions may make subjects uncomfortable or be perceived as an intrusion on their privacy. To mitigate these risks, all LezParlay question responses will be linked to unidentifiable PIN numbers and participants will be able to skip questions they do not feel comfortable answering without penalty. Participants may also experience discomfort upon receipt of personalized normative feedback. For example, it may be distressing for a participant to learn that other lesbians the same age are drinking much less but exercising much more than you. Although igniting such dissonance, or discomfort, is the primary goal of PNF interventions in that these feelings motivate healthy behavior change, participants will be provided an opportunity to skip the detailed results screens that provide PNF and advance to the next round if they wish to do so.

5. CONFIDENTIALITY

Will subjects be identifiable by name or other means? If subjects will be identifiable, explain the procedures that will be used for collecting, processing, and storing data. Who will have access to data? What will be done with the data when the study is completed? If you are collecting visual images of your subjects please justify this.

Participants will not provide their full names and identifiable data will only be collected in the initial registration survey (their initials or a nickname, email address, mobile phone number, birthdate, relationship status, sexual identity, and a profile picture if they wish to upload one). The app's terms of Service and Privacy Policy clarify that displaying a profile photo, describing oneself via descriptive text, and entering all profile information with the exception of sexual identity and age group (required for round formatting) is optional and not required to take part in the LezParlay competition. It will also be clear that player's contact information entered at registration (email, phone) will not be visible to other players. It is important to emphasize that although participants will be able to browse one another's player profiles, no distinction will be made as to who is playing as an intervention study participant versus a non-study participant. Thus, while players may recognize one another when viewing profiles, participation in the evaluation study entirely remains confidential.

Submitting the registration form will trigger a verification text message to be sent to the mobile phone number provided by the participant. Upon receiving the text and clicking on the unique url delivered, the user will be updated with a verification checkmark in the registration database. Simultaneously, verification locks the phone number so that it cannot be associated with any future LezParlay registrations and assigns a unique PIN to the user in the registration database. As most individual's only own a single mobile phone (or 2 at the most), this protocol reduces players' ability to cheat in LezParlay by creating multiple accounts in order to place wagers on all possible combinations of guesses. Further, the unique PIN assigned to each verified account then acts as the piece of data used by LezParlay to link participants' guesses, bets, responses and scores across rounds of play.

As the LezParlay collects all round data through styled Qualtrics surveys fully embedded into the app, all data is protected by Transport Layer Security (TLS) encryption (also known as HTTPS), which is a protocol that ensures privacy between communicating applications and their users on the Internet. Also used to secure bank and credit card transactions online, TLS ensures that no third party may

eavesdrop or tamper with submitted data. Further, after data collection concludes and all personalized feedback, scores, and incentives, have been received by participants, user photos and identifying information will be destroyed. Only datasets containing de-identified LezParlay Round data will be downloaded from Qualtrics for analysis, password protected, and stored securely on HeadsUp's internal, further password protected server. Thus, these double password protected files will only be accessible to the PI (Joseph LaBrie) and Project Director (Sarah Boyle).

6. INFORMED CONSENT

Attach an informed consent form or a written request for waiver of an informed consent form. Include waiver of written consent if appropriate. If your research is being conducted in another language, please include copies of the translated "Informed Consent" or "Waiver of Written Consent" forms.

This research requires 2 levels of consent. First, the LezParlay Terms of Service and Privacy Policy must be accepted by ALL players at sign-up. Second, players who meet Evaluation Study criteria during Round 3 and express interest in taking part in the study will be directed to review and complete the Evaluation Study's informed consent form. These documents are separately attached.

7. STUDENT RESEARCH

When a student acts as principal investigator, a faculty sponsor signature is required on the application form.

N/A

8. RENEWAL APPLICATIONS

When the submission is a Renewal Application, include a summary of the research activities during the previous granting period specifically addressing: number of subjects studied and any adverse reactions encountered, benefits which have been derived, any difficulty in obtaining subjects or in obtaining informed consent, and approximate number of subjects required to complete the study.

N/A

9. PAYMENTS

If subjects are to be paid in cash, services, or benefits, include the specific amount, degree, and basis of remuneration.

All participants will have the opportunity to compete for a cash prize in each round (one prize ranging from \$100 to \$500) as well as cumulative cash prizes to be awarded to top scorers in each age-group (1st place=\$1000; 2nd place=\$500, 3rd place=\$250) at the end of the game. These prizes will take the form of Visa gift cards. Winners will be notified via text message and email and will be asked whether they prefer to have an electronic Visa gift card emailed to them or have a physical version mailed to them. Those who elect to have a physical version mailed will be asked to provide their postal address.

Evaluation study participants (N=500) who play the majority of rounds and complete the follow-up survey will receive \$40 in e-gift cards of their choice (iTunes, Amazon, Target or Starbucks). Consistent with other university and NIH sponsored research conducted by our team, giftcards will be sent via GiftBit. Players will receive a \$20 giftcard for completion of rounds and a \$20 giftcard for completion of the post-competition feedback survey.

10. PSYCHOLOGY SUBJECT POOL

When students from the Psychology Subject Pool (PSP) are to be involved as subjects, permission must be obtained from the PSP prior to running subjects.

Forms are available from the Psychology Office in 4700 University Hall. It is not necessary to inform the IRB of approval from the PSP, however the PSP requires IRB approval prior to permission for using the pool being granted.

N/A

11. QUALIFICATIONS AND TRAINING

Describe the qualifications of, or method of training and supervision afforded student experimenters. This includes past experience, type and frequency of student/sponsor interactions during the experiment, and Human Subjects Protections Training.

N/A

12. RANDOMIZATION

Describe criteria for assigning subjects to sub-groups such as "control" and "experimental."

As described previously, Qualtrics Research Suite's automated randomizer will be used to randomize evaluation study participants to a PNF condition at the point of study enrollment in round 3. Randomization determined the sequence of topics on which participants received detailed results across intervention rounds 3 and 4: alcohol+coping, alcohol+control, or control only. Members of the research team will be blinded to participant condition assignment, and the study participants will not be aware that any sort of randomization was taking place. Rather, when detailed results were sent at the end of each round, players will be prompted to choose among 3 animated, graphical doors to determine the 1 to 2 round topics on which they would view detailed results. Although the results topics will be truly determined via chance in most rounds of the competition, the doors of evaluation study participants will be fixed to open to their randomly assigned feedback topics regardless of the door they selected in rounds 3 and 4. Upon completing the feedback survey at the end of the competition, participants will be debriefed regarding the study's research questions and the fixed sequences of health or control feedback they were randomized to receive in rounds 3 and 4.

13. USE OF DECEPTION

If the project involves deception, describe the debriefing procedures that will be used.

Include, verbatim, the following statement in the consent form: "Some of the information with which I will be provided may be ambiguous or inaccurate. The investigator will, however, inform me of any inaccuracies following my participation in this study."

Although none "of the information which participants will be provided will be ambiguous or inaccurate" under any circumstances, the fixed nature of the feedback selection mechanism encountered by Evaluation Study participants in Rounds 3 and 4 may be considered minor deception. Thus, upon completion of the follow-up survey intervention study participants will be debriefed regarding the non-random nature of these mechanisms. (See APPENDIX D for debriefing statement)

14. QUESTIONNAIRES AND SURVEYS

Include copies of questionnaires or survey instruments with the application (draft form is acceptable).

If not yet developed, please so indicate and provide the Committee with an outline of the general topics that will be covered. Also, when the questionnaire or interview schedule has been compiled, it must be submitted to the Committee for separate review and approval. These instruments must be submitted for approval prior to their use.

Consider your population. If they are foreign speakers, please include copies in the foreign language.

See APPENDIX C for questions to be asked in LezParlay rounds, and APPENDIX D for the post-competition feedback survey to be completed by Evaluation Study participants.

15. PHYSICIAN INTERACTIONS

To ensure that all patients receive coordinated care, the principal investigator is obligated to inform the primary physician (when not the principal investigator) of all studies on his/her patients.

N/A

16. SUBJECT SAFETY

Describe provisions, if appropriate, to monitor the research data collected, to ensure continued safety to subjects.

N/A

17. REDUNDANCY

To minimize risks to subjects, whenever appropriate, use procedures already being performed on the subjects for diagnostic or treatment purposes. Describe provisions.

N/A

18. COUNSELING

In projects dealing with sensitive topics (e.g., depression, abortion, intimate relationships, etc.) appropriate follow-up counseling services must be made available to which subjects might be referred.

The IRB should be notified of these services and how they will be made available to subjects.

N/A

19. SAFEGUARDING IDENTITY

When a research project involves the study of behaviors that are considered criminal or socially deviant (i.e., alcohol or drug use) special care should be taken to protect the identities of participating subjects.

In certain instances, principal investigators may apply for "Confidentiality Certificates" from the Department of Health and Human Services or for "Grants of Confidentiality" from the Department of Justice.

N/A... All participants in this study will be of the legal drinking age.

20. ADVERTISEMENTS

If advertisements for subjects are to be used, attach a copy and identify the medium of display. See Appendix A for recruitment/promotional ads.

21. FOREIGN RESEARCH

When research takes place in a foreign culture, the investigator must consider the ethical principles of that culture in addition to the principles listed above.

N/A

22. EXEMPTION CATEGORIES (45 CFR 46.101(b) 1-6)

If you believe your study falls into any of the Exemption Categories listed below, please explain which category(ies) you believe it falls into and why.

- 1) Research conducted in established or commonly accepted educational settings, involving normal educational practices, such as (i) research on regular and special instructional strategies, or (ii) research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
- 2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), if information taken from these sources is recorded in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.
- 3) Research involving survey or interview procedures, except where all of the following conditions exist: (i) responses are recorded in such a manner that the human subjects can be identified, directly or through identifiers linked to the subjects, (ii) the subject's responses, if they became known outside the research, could reasonably place the subject at risk of criminal or civil liability, or be damaging to the subject's financial standing, employability, or reputation, and (iii) the research deals with sensitive aspects of the subject's own behavior, such as illegal conduct, drug use, sexual behavior, or use of alcohol.

All research involving survey or interview procedures is exempt, without exception, when the respondents are elected or appointed public officials, or candidates for public office.

- 4) Research involving the observation (including observation by participants) of public behavior, except where all of the following conditions exist: (i) observations are recorded in such a manner that the human subjects can be identified, directly or through the identifiers linked to the subjects, (ii) the observations recorded about the individual, if they became known outside the research, could reasonably place the subject at risk of criminal or civil liability, or be damaging to the subject's financial standing, employability, or reputation, and (iii) the research deals with sensitive aspects of the subject's own behavior such as illegal conduct, drug use, sexual behavior, or use of alcohol.
- 5) Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

- 6) Unless specifically required by statute (and except to the extent specified in paragraph (1)), research and demonstration projects which are conducted by or subject to the approval of the Department of Health and Human Services, and which are designed to study, evaluate, or otherwise examine: (i) programs under the Social Security Act or other public benefit or service programs, (ii) procedures for obtaining benefits or services under those programs, (iii) possible changes in or alternatives to those programs or procedures, or (iv) possible changes in methods or levels of payment for benefits or services under those programs.

N/A

Please deliver to: Julie Paterson, IRB Coordinator, University Hall, Suite 1718 or
jpaterso@lmu.edu.

Appendix A

LezParlay Promotional Flyer and Social Media Ads



Figure A6. Flyer to be distributed at local LBQ events in Los Angeles, CA along with promotional branded items (chapsticks, coffee mugs, temporary tattoos)



Figure A1. Lesbian-identity tailored HER Social App campaign promo video to be pinned to the top of HER newsfeed area. Viewable at <https://www.youtube.com/watch?v=x9Y7oobC1Zw>

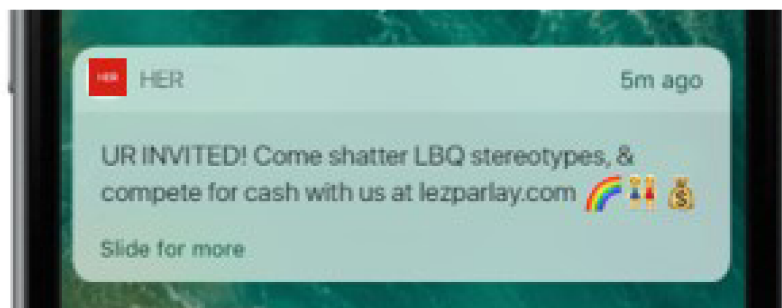


Figure A2. HER Social App banner smartphone notification to be received by users in Los Angeles, New York City, and Atlanta

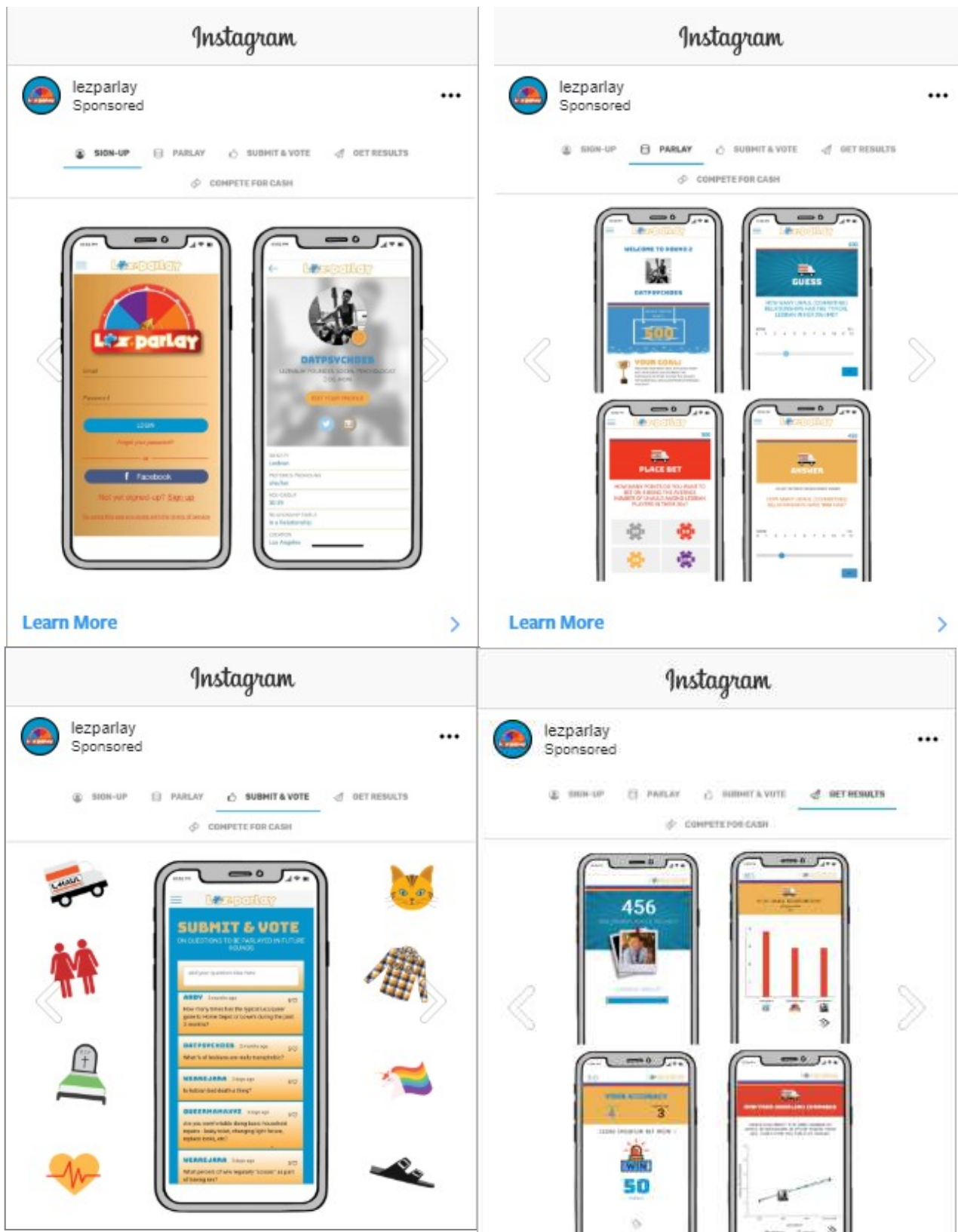



Figure A3. LezParlay multi-image carousel ad mockups for Facebook and Instagram

LezParlay
Sponsored · ⚙️

Find out how your health, drinking, and relationship history really compare to other women your age while increasing LBQ visibility, challenging stereotypes, & competing for cash in our online LezParlay competition! IT'S FREE.



LEZPARLAYLA.COM


Compete against LBQ women in their 40s & 50s [Learn More](#)

cats. lesbian bed death. flannel shirts. co-dependence....


Like Comment Share

LezParlay
Sponsored · ⚙️

Got 2 minutes? Round 2 of the competition closes soon and \$300 is up for grabs... 800 LBQ players and growing, you don't wanna miss this!



tats, flannel, & gold stars [Sign Up](#)



get your bets in before it's too late

Like Comment Share

Figure A4. Additional drafts of Facebook & Instagram ads.

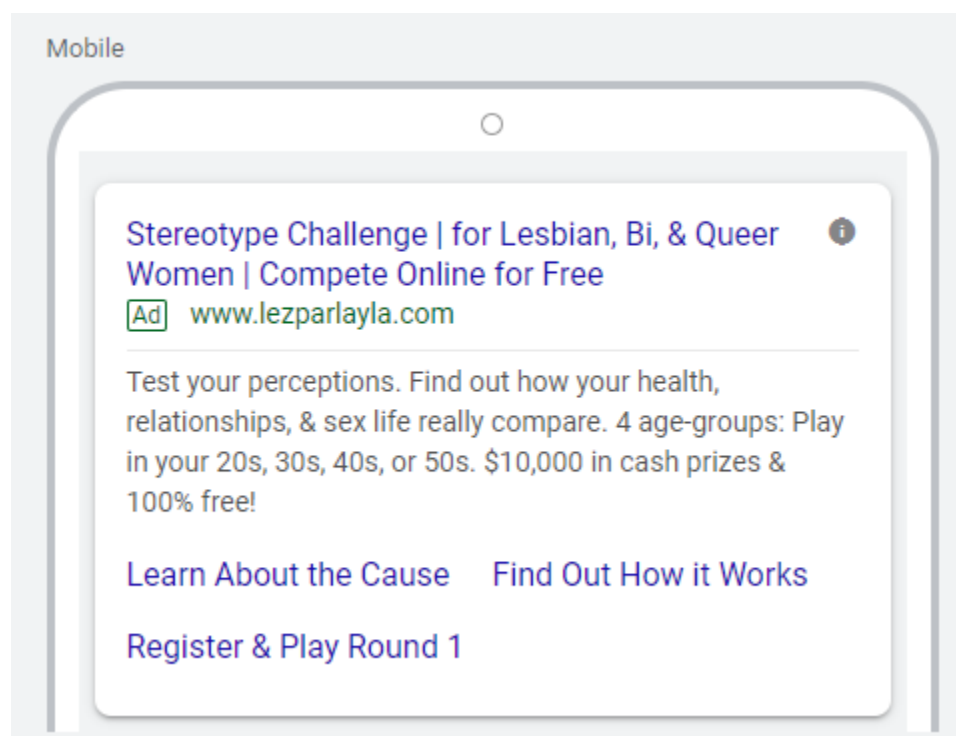
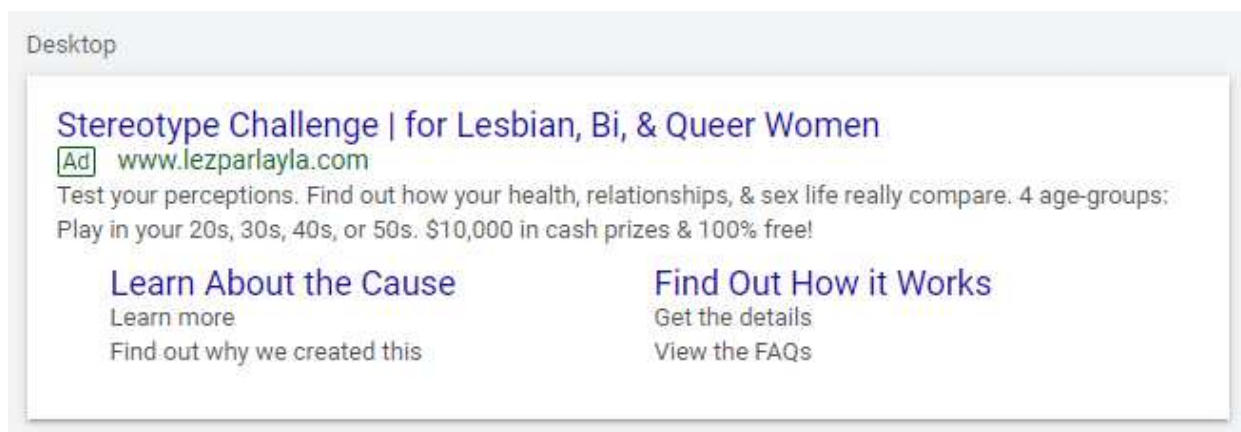
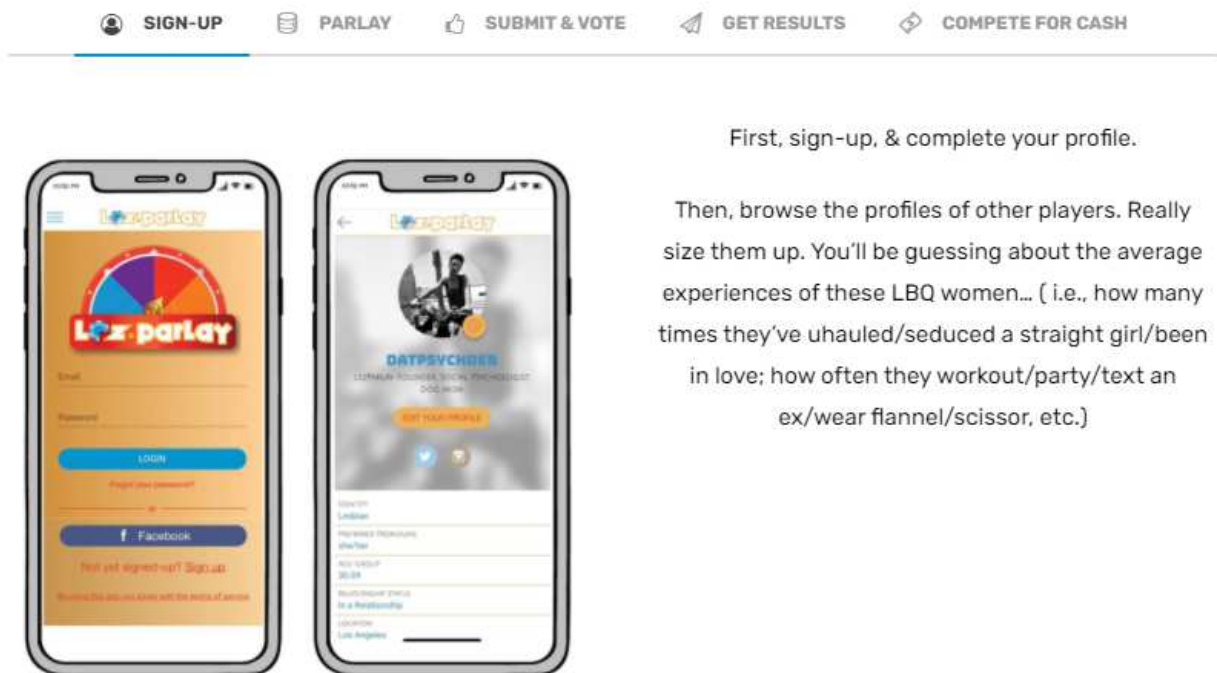


Figure A5. Google Search Ad Preview targeting searches of terms and phrases including “lesbian chat”, “lesbian dating site” “queer dating” “bisexual dating” “LGBTQ pride events” “queer chat” “lesbian bar” “queer nightclub” “lesbian party” “queer party”

Appendix B

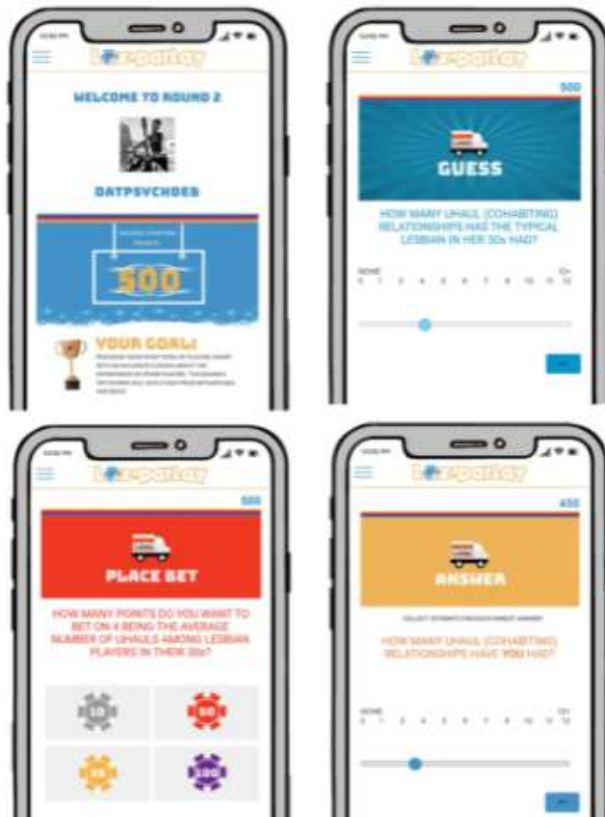
App Screen Mockups and Overview from LezParlay Landing Page

All app screens (with Round 1 programmed) can also be viewed at www.lezparlay.com



First, sign-up, & complete your profile.

Then, browse the profiles of other players. Really size them up. You'll be guessing about the average experiences of these LBQ women... (i.e., how many times they've uhailed/seduced a straight girl/been in love; how often they workout/party/text an ex/wear flannel/scissor, etc.)



Each round, **GUESS** how other players your age will answer a few questions and choose the number of points you want to **BET** on your guesses being accurate based on the responses of other players. Then, collect points for **ANSWERING** the same questions for yourself. Receive a record of your guesses and bets via email as soon as you submit them.

If your guess is close enough to the average or aggregate response of other players then the points you **BET** will be added to your score. If your guess is dead on, you'll win 2x your bet. But, if your guess is off, you'll lose these points:<

[SIGN-UP](#)[PARLAY](#)[SUBMIT & VOTE](#)[GET RESULTS](#)[COMPETE FOR CASH](#)

Each round will stay open for 3 weeks and close after enough players have placed bets in each age-group. While you wait for results, help shape the competition and grab bonus points by submitting questions to be PARLAYed in future rounds and voting on those submitted by other players.

Get at a stereotype, a divisive community issue, or any experience you think might be amusing or valuable to PARLAY... anything goes. The top vote-getting questions will be featured in an upcoming round.





When the round closes we'll text you a link to view your detailed, personalized results. Find out the accuracy of your guesses, the points you won and lost, how your responses compare to other lesbian, bi, and queer players, any stereotypes shattered or confirmed, and the winner of the cash prize.

APPENDIX C

Norm questions to be featured in intervention rounds or potentially featured as control/filler questions in LezParlay Rounds

- Parallel Questions will also ask participants to report their own corresponding behavior/attitude/experience
- All questions will pipe the sexual identity (lesbian, bisexual, queer) and age-group (20s, 30s, 40s, 50s) of the user
- Some question topics and questions to appear in rounds will be voted on by players.
- Players can also submit their own questions to be voted on and potentially featured in some rounds.
- If any top voted user-submitted materially differ from those submitted in this exhaustive potential question list, we will submit an addendum to the IRB and get approval before any are featured in a round.

Alcohol Use Questions (Round 3 & Replay Bonus in Round 7)

During the past 2 months, on average, how many days per week did the Typical Lesbian drink alcohol?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7

During the past 2 months, on average, how many drinks did the Typical Lesbian have each time she drank?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9

- ☐ 10 or more

On the day she drank the MOST during the past 2 months, how many drinks did the Typical Lesbian have?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10
- ☐ 11
- ☐ 12 or more

HAD A HANGOVER OR ILLNESS

HAD PROBLEMS WITH FRIENDS OR FAMILY

GOT IN A PHYSICAL OR VERBAL FIGHT

PERFORMED POORLY AT WORK/SCHOOL

HAD PROBLEMS WITH GF/PARTNER

HAD PROBLEMS WITH MONEY

MISSED A SOCIAL ENGAGEMENT OR
EVENT

HAD AN UNWANTED OR REGRETTABLE
SEXUAL EXPERIENCE

During the past 2 months, how many of the 8 things above has the typical lesbian experienced due to drinking/partying?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7

Stigma Questions (Round 3 & Replay Bonus in Round 7)

During the past 2 months, what % of lesbians have been physically assaulted due to their sexual identity?

0% -----100%

During the past 2 months, what % of lesbians have been verbally harassed or threatened online or in person due to their sexual identity?

0% -----100%

During the past 2 months, what % of lesbians have overheard negative LGBTQ-related comments, jokes, or slurs?

0% -----100%

During the past 2 months, what % of lesbians have felt unwelcome or uncomfortable in a public place (gym locker room, store, restaurant, etc., due to their sexual identity?

0% -----100%

Coping Behaviors (Round 4)

When experiencing stress & stigma during the past month, what % of the time did the typical lesbian cope by drinking alcohol?

0% -----100%

When experiencing stress & stigma during the past month, what % of the time did the typical lesbian cope by taking a drug?

0% -----100%

When experiencing stress & stigma during the past month, what % of the time did the typical lesbian cope by meditating, using relaxation techniques, or exercising?

0% -----100%

When experiencing stress & stigma during the past month, what % of the time did the typical lesbian cope by talking to a close friend, family member, or mental health professional?

0% -----100%

How acceptable or unacceptable does the Typical lesbian find using alcohol and drugs to cope with problems or negative emotions?

Extremely Unacceptable ----- Extremely Acceptable

How acceptable or unacceptable does the Typical Lesbian find seeing a mental health professional for help coping with problems or negative emotions?

Extremely Unacceptable ----- Extremely Acceptable

Health related questions to be featured in the final round for norm documentation purposes

In the past month, how many days per week did the Typical Lesbian exercise for 45 minutes or longer (e.g., run, cycle, spin, lift weights, swim, etc.)?

☐ 0

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

- ☐ 6
- ☐ 7

How long ago was the Typical lesbian's last routine wellness check-up?

- ☐ less than 5 months ago
- ☐ 6-11 months
- ☐ 1 year
- ☐ 2 years
- ☐ 3 years
- ☐ 4 years
- ☐ 5 years or longer

How long has it been since the Typical Lesbian last had a pap test?

- ☐ 6 months or less
- ☐ 7-12 months
- ☐ 1.5 years
- ☐ 2 years
- ☐ 2.5 years
- ☐ 3 years or longer
- ☐ She has never had one!

What percent of typical Lesbians are "out" to their doctor?

0%-----%100

What percent of lesbians currently smoke cigarettes or vape?

0%-----%100

What percent of lesbians used to smoke but successfully quit?

0%-----%100

What percent of lesbian smokers, regret ever having started smoking?

0%-----%100

What percent of lesbians would NOT date a smoker?

0%-----%100

Potential non-health related control and filler questions to appear in rounds

How many uhaul (cohabitating) relationships has the typical lesbian had?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 or more

How many ex-girlfriends has the typical lesbian in her 30s talked to in the past month?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 or more

What percent of lesbians currently have 1 or more cats in their household?

0% -----100%

What percent of lesbians currently have 1 or more dogs in their household?

0% -----100%

What percent of lesbians like cats more than dogs?

0% -----100%

What percent of lesbians have rescued a pet?

0% -----100%

What percentage of lesbians see themselves living in their current state for the rest of their lives?
0% -----100%

What percentage of lesbians see themselves getting married or are already married?
0% -----100%

What percentage of lesbians see themselves raising children or are already raising children?
0% -----100%

What percentage of lesbians want to give birth or already have?
0% -----100%

What percentage of lesbians own a pair of Birkenstocks?
0% -----100%

What percentage of lesbians have worn a beanie or a fedora during the past month?
0% -----100%

What percentage of lesbians have worn a flannel shirt in the past month?
0% -----100%

What percentage of lesbians own a black leather jacket?
0% -----100%

What percentage of lesbians have short hair?
0% -----100%

How many tattoos does the typical lesbian have?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 or more

How many flannel shirts does the typical lesbian own?

- ☐ 0
- ☐ 1
- ☐ 2

- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8
- ☐ 9
- ☐ 10 or more

How many piercings does the typical lesbian have?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8 or more

How many times has the Typical Lesbian been in love?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7
- ☐ 8 or more

What percent of lesbians have had a relationship with someone they met online?

0%-----%100

How acceptable or unacceptable would the typical lesbian find only seeing a new love interest twice a week for the first few months of dating?

- ☐ Very Unacceptable
- ☐ Moderately Unacceptable
- ☐ Slightly Unacceptable

- ☐ Neither Unacceptable or Acceptable
- ☐ Slightly Acceptable
- ☐ Moderately Acceptable
- ☐ Very Acceptable

How acceptable or unacceptable would the typical lesbian find waiting at least 12 months to move in with a new girlfriend?

- ☐ Very Unacceptable
- ☐ Moderately Unacceptable
- ☐ Slightly Unacceptable
- ☐ Neither Unacceptable or Acceptable
- ☐ Slightly Acceptable
- ☐ Moderately Acceptable
- ☐ Very Acceptable

How acceptable or unacceptable would the typical lesbian find getting to know a love interest for 4 weeks before having sex with her?

- ☐ Very Unacceptable
- ☐ Moderately Unacceptable
- ☐ Slightly Unacceptable
- ☐ Neither Unacceptable or Acceptable
- ☐ Slightly Acceptable
- ☐ Moderately Acceptable
- ☐ Very Acceptable

Sex

How many female sexual partners has the Typical Lesbian had?

1	13
2	14
3	15
4	16
5	17
6	18
7	19
8	20 or more
9	
10	
11	
12	

During the past month, on average, how many days per week did the Typical Lesbian have sex?

- ☐ 0
- ☐ 1
- ☐ 2

- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7

During the past month, how long in duration was the Typical Lesbian's average sexual encounter?

- ☐ 10 minutes or less
- ☐ 11-20 minutes
- ☐ 21-30 minutes
- ☐ 31-40 minutes
- ☐ 41-50 minutes
- ☐ 51-60 minutes
- ☐ 61-70 minutes
- ☐ 71 minutes or more

What percent of lesbians have experienced "lesbian bed death" or an extremely low frequency of sex in a serious relationship?
0%-----%100

What percent of lesbians scissor?
0%-----%100

What percent of lesbians have all 3 of the following social media accounts: Facebook, Twitter, Instagram?
0%-----%100

What percent of lesbians have used HER social app?
0%-----%100

What percent of lesbians read IntoMore or Autostraddle?
0%-----%100

How many seasons of the LWord has the typical lesbian seen?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5

- ☐ 6

How many times per day does the typical lesbian check Facebook?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

How many times per day does the typical lesbian check Instagram?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

How many times per day does the typical lesbian check Twitter?

- ☐ 0
- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐ 6
- ☐ 7 or more

What percent of lesbians voted in the midterm election?
0%-----%100

What percent of lesbians have attended a political march or protest during the past year?
0%-----%100

What percent of lesbians consider themselves to be a feminist?
0%-----%100

What percent of lesbians hate men?
0%-----%100

What percent of lesbians have negative attitudes toward transwomen?
0%-----%100

What percent of lesbians are good at household repairs?
0%-----%100

What percent of lesbians have visited a home improvement store in the past month?
0%-----%100

What percent of lesbians consider themselves to be athletic?
0%-----%100

What percent of lesbians played a varsity sport in high school or college?
0%-----%100

What percent of lesbians own a toolbox?
0%-----%100

What percent of lesbians would change their own flat tire rather than calling AAA?
0%-----%100

What percent of lesbians are vegan or vegetarian?
0%-----%100

What percent of lesbians have been confused for sisters while out with a significant other?
0%-----%100

What percent of lesbians have been told their sexual identity is "just a phase"
0%-----%100

What percent of lesbians have seduced a straight woman?
0%-----%100

What percent of lesbians have had a threesome?
0%-----%100

What percent of lesbians have been in a polyamorous relationship?
0%-----%100

Appendix D

LezParlay Post-Competition Feedback Survey

What is your current age in years?

Which best describes your sexual identity?

lesbian

bisexual

queer

For how many years has this been your sexual identity?

Which best describes your relationship status?

Are you Hispanic or Latinx?

What category best describes your race?

What is the highest level of education you have completed?

How did you hear about LezParlay?





Great, thanks!

Next, let us know how much you **DISLIKED** or **LIKED** each aspect of LezParlay...



	Disliked very much	Disliked	Neutral	Liked	Liked very much
The "stereotype challenge" concept	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The topics & questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The detailed results you received	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to browse player profiles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to submit & vote on questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to bet on your guesses being correct in some rounds	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Text messages from LezParlay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Emails from LezParlay	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The leaderboards showing the Top 100 Scorers each round	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to win money & get gift cards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Would the potential changes listed below make you LESS likely, EQUALLY likely, or MORE likely to play LezParlay in the future?

	LESS likely to play	EQUALLY likely to play	MORE likely to play
The ability to download and play in a native iphone/ android app	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More frequent rounds with fewer questions in each (i.e., 1 round per week with 3 questions each round)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your scores & stats visible to you in the app at all times	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your scores and stats visible to other players at all times	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to challenge another player & earn bonus points if you beat them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playing against a featured queer influencer/celebsbian type each round & earning bonus points if you score higher than them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to connect your profile to your significant other's profile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to compete as a couple against other couples	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to send other players a "wink" or "nod"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The ability to message other players	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Did you find taking part in the competition to be beneficial to you at all?

No

☐

Yes

☐

[IF YES]



Great! Please use the text box below to briefly describe how the competition was beneficial for you



Do you any other ideas about how LezParlay might be improved?
What would you like to see be different in the next version?



Last thing, we promise! Now that the summer is ending,
please answer the 5 drinking questions a final time.



SINCE THE BEGINNING OF JULY, ON AVERAGE, HOW MANY DAYS PER WEEK
HAVE **YOU** DRANK?

0 1 2 3 4 5 6 7



SINCE THE BEGINNING OF JULY, ON AVERAGE, HOW MANY DRINKS HAVE **YOU** HAD EACH
DAY YOU DRANK?

0 0 1 2 4 5 6 7 8 10 11 12+ 12





SINCE THE BEGINNING OF JULY, ON THE DAY YOU DRANK THE MOST, HOW MANY DRINKS
DID **YOU** HAVE?

0 1 2 3 4 5 6 7 8 9 10 11 12+
0 12



HAD A HANGOVER OR ILLNESS

HAD PROBLEMS WITH FRIENDS OR FAMILY

GOT IN A PHYSICAL OR VERBAL FIGHT

PERFORMED POORLY AT WORK/SCHOOL

HAD PROBLEMS WITH GF/PARTNER

HAD PROBLEMS WITH MONEY

MISSED A SOCIAL ENGAGEMENT OR
EVENT

HAD AN UNWANTED OR REGRETTABLE
SEXUAL EXPERIENCE

SINCE THE BEGINNING OF JULY, HOW MANY OF THE 8 THINGS ABOVE HAVE YOU
EXPERIENCED DUE TO DRINKING/PARTYING?



SINCE THE BEGINNING OF JULY, WHEN YOU'VE EXPERIENCED STIGMA OR NEGATIVE EMOTIONS WHAT % OF THE TIME DID YOU DRINK ALCOHOL IN AN EFFORT TO FEEL BETTER?

0 10 20 30 40 50 60 70 80 90 100



[End of Survey Debriefing Statement]



A FINAL THANKS & DISCLOSURE...

Thanks again for helping us evaluate LezParlay! Before you go we wanted to give you some more information about the detailed results you received in the LezParlay as an Official Tester. In addition to getting your feedback and ideas for the next version of the competition, another goal of this study was to evaluate whether delivering results for health-related topics in LezParlay had any benefits for players' health and well-being. To fully examine this, we had to make sure that balanced groups of Official Testers received more and less health-related feedback.

So, full disclosure, the topics you received detailed results on in Rounds 3 and 4 of the game were not totally random in the same way they were in all of the other rounds (where they were determined by the doors you chose to open). Instead, as an Official Tester you were randomized to receive a specific sequence of feedback in Rounds 3 and 4 and the doors you selected were fixed to open to either health-related topics or topics unrelated to health. So, we're not sure if the health-related detailed results were beneficial yet, but analyzing the data from this study will allow us to find out! We also plan to examine whether you all reported different types of psychological benefits and/or differential levels liking for aspects of the competition based on the sequences of detailed results you received.

If you are interested in finding out what we learn here please let us know by sending an email to sarah@lezparlay.com and we'll be sure to send you a summary of results when they are ready. Thanks again for your participation!